

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

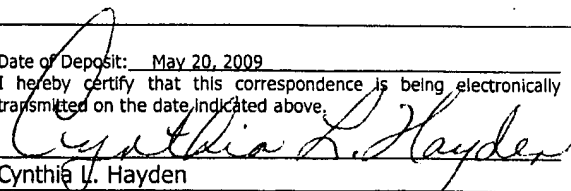
In re Applicant:	§	
Alessia Pavan et al.	§	Art Unit: 2894
	§	
Serial No.: 10/749,130	§	
	§	
Filed: December 30, 2003	§	Examiner: Amar Movva
	§	
For: Non-Volatile Memory Cell	§	Conf. No.: 3296
Comprising Dielectric Layers	§	
Having a Low Dielectric	§	
Constant and Corresponding	§	Atty Docket: NUM.0104US
Manufacturing Process	§	

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF**

Date of Deposit: May 20, 2009

I hereby certify that this correspondence is being electronically transmitted on the date indicated above.

  
Cynthia L. Hayden

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### **REAL PARTY IN INTEREST**

The real party in interest is Numonyx, B.V.

)

**RELATED APPEALS AND INTERFERENCES**

None.

### **STATUS OF CLAIMS**

Claims 1-38 (Canceled).

Claims 39-46 (Rejected).

Claims 39-46 are rejected, but only claim 42 is the subject of this Appeal Brief.

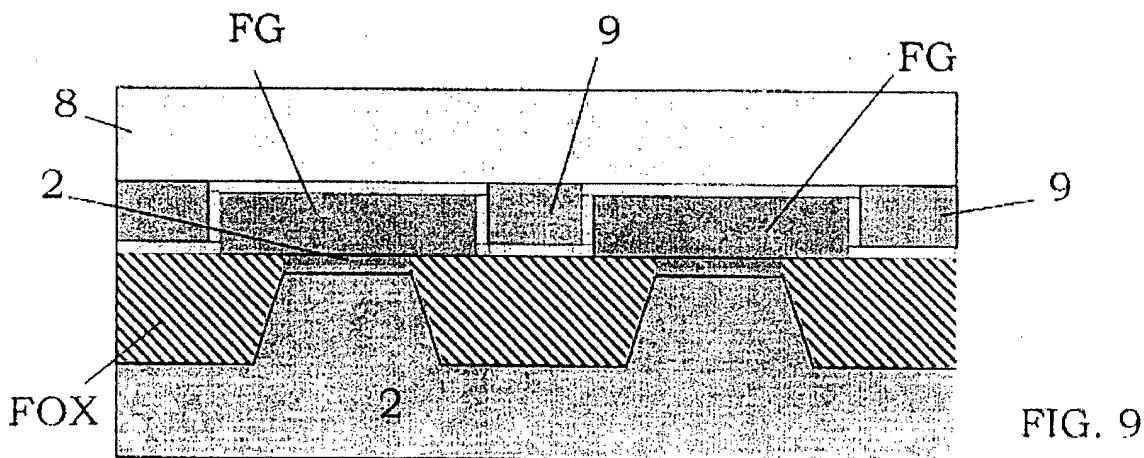
## **STATUS OF AMENDMENTS**

All amendments have been entered.

## SUMMARY OF CLAIMED SUBJECT MATTER

In the following discussion, the independent claims are read on one of many possible embodiments without limiting the claims:

39. A memory comprising:
- a pair of adjacent cells (Fig. 9, 1) having separate floating gates (Fig. 7, FG) (specification at page 6, lines 2-8);
  - a field oxide (Fig. 9, FOX) between said cells (specification at page 2, lines 26-30);
  - a first dielectric (Fig. 9, 7) covering said floating gates and said field oxide (specification at page 8, lines 2-9);
  - a second dielectric (Fig. 9, 9) over said first dielectric between said floating gates, said second dielectric having a lower dielectric constant than said first dielectric (specification at page 7, lines 20-24 and page 8, line 29 - page 9, line 2); and
  - a control gate (Fig. 9, 8) over said first and second dielectrics (specification at page 8, lines 2-9).



42. The memory of claim 41 wherein said first dielectric includes ONO (specification at page 8, line 29 - page 9, line 2).

At this point, no issue has been raised that would suggest that the words in the claims have any meaning other than their ordinary meanings. Nothing in this section should be taken as an indication that any claim term has a meaning other than its ordinary meaning.



**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

- A. Whether claims 39 and 41-43 are anticipated under 35 U.S.C. 102(b) by Arai.**
- B. Whether claims 39, 41 and 46 are anticipated under 35 U.S.C. 102(b) by Tanimoto.**
- C. Whether claims 40 and 44 are unpatentable under 35 U.S.C. 103(a) over Arai in view of Liu.**
- D. Whether claims 40 and 45 are unpatentable under 35 U.S.C. 103(a) over Arai in view of Ahn.**

## **ARGUMENT**

**A. Are claims 39 and 41-43 anticipated under 35 U.S.C. 102(b) by Arai?**

Claim 39 requires that the second dielectric be over the first dielectric between the floating gates. Thus, the floating gates in Figure 2 of Arai are the items 4. The region between the floating gates only includes, at most, a portion of the layer 5b and the layer 5a. Thus, all that can be considered part of the first dielectric is the portion of layer 5a between the floating gates 4 and the small portion of the layer 5b between the floating gates 4. This is because the layer 5c stops exactly at the edge of each floating gate. Thus, it is clear that the first dielectric, as defined in claim 42, only includes oxide and nitride and not a second layer of oxide in the claimed position.

Therefore, the rejection of claim 42 should be reversed.

**B. Are claims 39, 41 and 46 anticipated under 35 U.S.C. 102(b) by Tanimoto?**

Not appealed.

**C. Are claims 40 and 44 unpatentable under 35 U.S.C. 103(a) over Arai in view of Liu?**

Not appealed.

**D. Are claims 40 and 45 unpatentable under 35 U.S.C. 103(a) over Arai in view of Ahn?**

Not appealed.

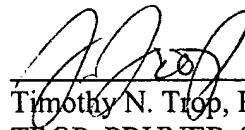
\* \* \*

Applicant respectfully requests that each of the final rejections be reversed and that the claims subject to this Appeal be allowed to issue.

Respectfully submitted,

Date:

5/20/2009



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## **CLAIMS APPENDIX**

The claims on appeal are:

42. The memory of claim 41 wherein said first dielectric includes ONO.

## **EVIDENCE APPENDIX**

None

## **RELATED PROCEEDINGS APPENDIX**

None